



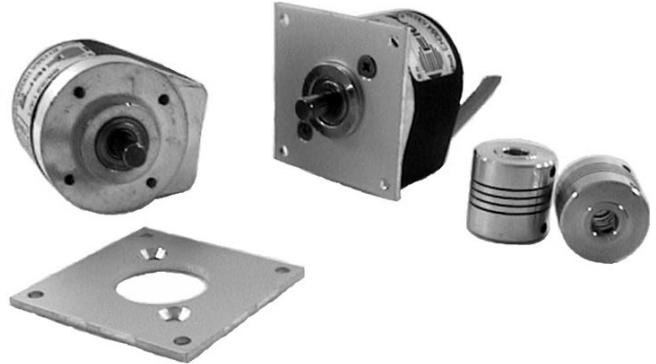
EH38A / B / D

INCREMENTAL ENCODERS

EH SERIES

Incremental encoder EH series

- Series of miniaturized encoders for general applications.
- Resolutions up to 1024 imp/turn
 - Different electronic configurations available with power supply up to 24 Vdc
 - Max output frequency up to 100 KHz
 - Output cable, eventual connector applied to the end of the cable
 - Different flanges available
 - Speed rotation up to 3000 rpm
 - Protection up to IP54



Ordering codes

EH 38 A 500 Z 5 N 6 X 3 P R . XXX

EH = incremental encoder EH series

38 = body dimension

A = mod.EH38A
B = mod.EH38B
D = mod.EH38D

Type of flanges

from **40 to 1024** imp./turn

Resolutions

N.B.: For impulse availability contact directly our offices

S = without zero impulse
Z = with zero impulse

Zero impulse

5
8 ÷ 24

Encoder power supply (Vdc)

In case of particular Customer variant separate with a full stop

XXX = Particular Customer variants indicated by a progressive number from 001 to 999

R = radial

P = output cable (standard length 0.5 m)

3 = 3000 max

R.P.M.

X = standard IP54

Protection

6 = ø6 mm

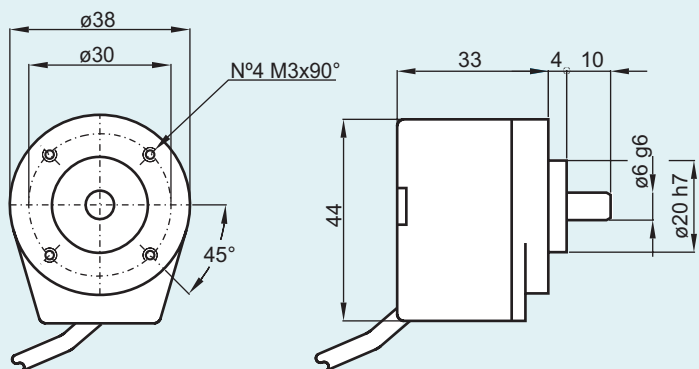
Shaft diameter

N = NPN
C = NPN OPEN COLLECTOR
P = PUSH PULL
L = LINE DRIVER

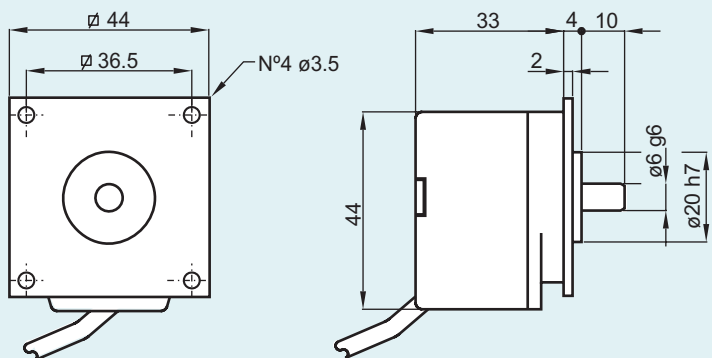
Electronic output configuration

N.B.: For the optionals on the output configurations see the output incremental connections card

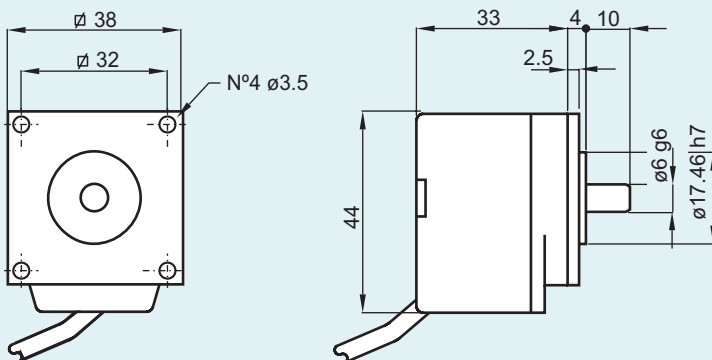
EH38A



EH38B



EH38D



Electronic Characteristics

| | |
|---|---|
| Resolution | From 40 to 1024 impulses / turn |
| Power supply | 5 Vdc / 8 + 24 Vdc |
| Current consumption without load | 50 mA bidirectional 100 mA bidirectional with zero |
| Max commutable current | 50 mA per channel 20 mA per channel with LINE DRIVER |
| Electronic output configuration | NPN / NPN OPEN COLLECTOR / PUSH PULL / LINE DRIVER |
| Max output frequency | Max 100 KHz |
| Frequency calculation | $F = \frac{\text{RPM} \times \text{Resolution}}{60}$ |

Mechanical characteristics

| | |
|-------------------------------|---|
| Shaft diameter (mm) | ø6 g6 |
| Protection | IP54 - Standard |
| R.P.M. Max | 3000 continous |
| Max shaft load | 5N (0.5 Kp) axial 5N (0.5 Kp) radial |
| Shock | 50 G per 11 msec |
| Vibration | 10G 10 + 2000 Hz |
| Bearings life | 10 ⁹ revolutions |
| Bearings | n°2 ball bearings |
| Shaft material | Stainless steel AISI303 |
| Body material | Aluminium UNI 5076 |
| Square flange material | Aluminium |
| Cover material | Special plastic reinforced with glass fibre |
| Operating temperature | 0° + 60°C |
| Storage temperature | -25° + 70°C |
| Weight | 100 g |

